

FALL-RELATED TRAUMATIC BRAIN INJURY

Facts about fall-related Traumatic Brain Injury (TBI) in Utah:

- Fall-related TBIs are a leading cause of injury death among Utahns ages 60 and older.¹
- 7% percent of fall-related TBI patients died in 2006.¹
- An average hospital stay for a fall-related TBI was 4.3 days and cost on average \$46,800.¹

TBIs included in this database:

- 1) Presence of one or more of the following:
 - Observed or self-reported unconsciousness or decreased level of consciousness;
 - Amnesia;
 - Skull fracture;
 - Changes in motor function, sensory function, reflexes, speech;
 - Seizures; or
 - Hemorrhages, bruising or other trauma of the brain.
- 2) A hospital stay or TBI that results in death.

2006 Utah Traumatic Brain Injury Data

WHO

- Falls were the leading cause of TBIs suffered by Utahns in 2006 (3.6 per 10,000 population).¹
- Females and males over age 70 had the highest rates of fall-related TBIs (24.6 per 10,000 population and 30.9 per 10,000 population respectively).¹
- Males ages 60-69 had the third highest rate of fall-related TBIs (6.0 per 10,000 population).¹

HOW

- Fall-related TBIs occurred most often from one level to another.¹
- Falls on the same level (such as tripping or slipping) were the second most common occurrence.¹

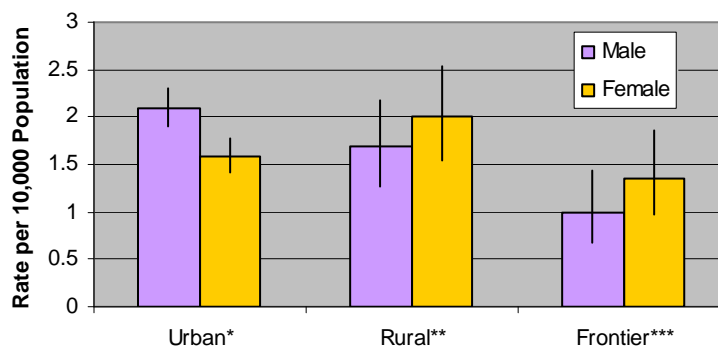
WHERE

- 57% of fall-related TBIs occur in or around the home.
- Males living in urban counties had the highest rate of fall-related TBIs (2.1 per 10,000 population).¹
- For females, fall-related TBIs were highest among those living in rural counties (2.0 per 10,000 population).¹

HOW MUCH

- Fall-related inpatient hospital charges totaled \$20 million or 28% of all TBI costs.¹

Fall-related TBIs by Sex and Geographic Location of Residence



Rates are based on sampled cases and adjusted to represent all TBIs in Utah (including unsampled and fatal TBIs).

*Urban is defined as 100 or more persons per square mile.

** Rural is defined as more than 6 but fewer than 100 persons per square mile.

*** Frontier is defined as fewer than 6 persons per square mile.

SENIOR FALL-RELATED TBI PREVENTION TIPS²

DID YOU KNOW ...

As adults age they spend more of their time at home?

As such, one-half to two-thirds of all older adult falls happen in or around the home. The majority of home falls occur on the same level—for example, tripping or slipping. Many seniors also suffer serious injuries when they slip or fall in the bathtub or shower and when getting out of bed. Physical changes that occur as people age, like eyesight, balance, and other health problems, also put seniors at risk of a fall injury.



There are many things you can do to help prevent fall-related TBIs among seniors.

Recommendation 1. Seniors should work with their health care providers to assess their medical risks for falling. Things to talk to your doctor about include:

- Have an annual physical exam.
- Have an annual eye exam.
- Review medications for possible side effects and interactions.
- Be screened for osteoporosis.
- If recommended by a doctor, take medications to strengthen bones.



- If recommended by a doctor, begin a strengthening/exercise program.
- Use a cane or walker to help with balance.

Recommendation 2. All seniors, and those who care for them, should check the home for and fix the following hazards:

- Unstable furniture
- Loose throw rugs
- Slippery bathroom surfaces
- Loose or missing stair railings
- Poor lighting (Falls can occur when older adults get up in the night to use the restroom. Nightlights should be used in bedrooms, hallways, and bathrooms.)
- Clutter
- Electrical cords in walkways
- Lack of grab bars near toilets and in tubs/showers



Recommendation 3. Seniors should be selective when choosing footwear.

- Flat shoes with sturdy, non-slip soles and good ankle support are best.
- Slippers are too unstable and should not be worn.
- Wearing socks without shoes is dangerous, especially on wood, tile, or other smooth surfaces.
- Avoid shoes with heels.
- Replace old or poorly-fitting shoes.

References

¹ Utah Department of Health, Violence & Injury Prevention Program, TBI database

² Utah Department of Health, Violence & Injury Prevention Program, *Falls Among Seniors: 1999-2004 Prevalence, Impact and Prevention*, <http://www.health.utah.gov/vipp/>